UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,579	07/29/2003	Sean K. Scorvo	8257.0003	1636

7590 01/17/2007

Kevin L. Russell
Suite 1600
601 SW Second Ave.
Portland, OR 97204-3157

EXAMINER
HOPKINS, CHRISTINE D

ART UNIT	PAPER NUMBER
3735	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/630,579	SCORVO, SEAN K.	
	Examiner	Art Unit	
	Christine D. Hopkins	3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) *6-31 and 36-44* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 32-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *21 Aug 2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 and 32-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Banik (U.S. Pub. No. 2003/0212306). Banik discloses an implantable device **100** for controlling fluid flow, particularly those experiencing incontinence. Further regarding claim 1, the implantable device is wrapped around a body lumen, such as the bladder neck, which defines an aperture. The implantable device **100** encompasses an electroactive polymer transducer **12** that expands and contracts in response to the flow of ions in or out of the member via electrolyte **14**, thus imposing a state of contraction or relaxation on the aperture of the lumen of interest [0064].

In view of claim 2, Banik teaches an actuator **10**, having a first surface (interpreted as the active members **112**) and a second surface (interpreted as the mesh or barrier layer) surrounding the active polymer that deforms in response to an electrical signal from the flow of ions (Fig. 2B and [0066]). A case **120** encompasses the actuator, having a first portion, which supports it in contact, and a second portion

proximate the duct of the lumen of interest. The case **120** encircles the lumen of interest such that it directly contacts all sides of the duct (see Fig. 8B). Thus, any deflection imposed by the electrical component of the actuator will in turn displace a portion of the wall of the duct such that constriction is imparted to the lumen of interest.

Regarding claim 3, the flow control devices taught by Banik also incorporate a sensing system for sensing the degree of contraction of the actuator [0027].

Referring to claim 4, Banik discloses two actuators (refer to Fig. 5B) where each is separated by a barrier layer **120** located in the central portion of the implant **100**, the first having a first and second surface whereby the first surface is proximate the exterior of the duct. The second actuator, also "proximate" the duct wall, and having a first and second surface, is diametrically opposed to the first surface of the first actuator when the implant **100** is positioned around the lumen of interest. A case **120** encompasses the actuators relative to the duct by contacting it, and acts to impose a restraint on the lumen of interest (see Fig. 8B).

Regarding claim 5, Banik teaches that one or more sensors may be placed on the implant **100** to provide electronic feedback [0098].

With reference to claims 32 and 33, Banik discloses an implantable device **100** for controlling fluid flow. The implantable device is wrapped around a body lumen, such as the bladder neck, which defines an aperture. The implantable device **100** encompasses an electroactive polymer transducer **12** that expands and contracts in response to the flow of ions in or out of the member via electrolyte **14**, thus imposing a state of contraction or relaxation on the aperture of the lumen of interest [0064]. An

algorithm ran by a computer sends a signal to the implant **100** to open or close it ([0118] and [0121]). A sensor **145, 146** outputs a signal that is analyzed by a microprocessor whereby another signal is sent from the microprocessor to the implant **100** to relax the cuff indicating a certain force placed on the lumen of interest.

Regarding claims 34 and 35, a fluid pressure device or cuff **100** increases pressure on a duct via a "reservoir" or electrolyte **14** which supplies the cuff with a flow of ions for contracting the lumen of interest. The "reservoir" is interpreted as such since the specification of the instant application does not clearly state its structure. The "reservoir" as taught by Banik has a flow connection to a duct as suggested by that of the instant application at line 3 of claim 34. The electrolytic material receives a signal via a microprocessor that acquires a signal from a sensing transducer to provide a flow of ions into or out of the transducer **12**, which acts to contract or expand the cuff in response to the flow of electrolytic material. The microprocessor runs an algorithm to analyze the data received from the sensing transducer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine D. Hopkins whose telephone number is (571) 272-9058. The examiner can normally be reached on Monday-Friday, 7 a.m.-3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II can be reached on (571) 272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles A. Marmor, II
Supervisory Patent Examiner
Art Unit 3735

Christine D Hopkins
Examiner
Art Unit 3735